

# **State of Tennessee Health Care Innovation Initiative**



## **Executive Summary**

Chronic Obstructive Pulmonary Disease (COPD) Acute  
Exacerbation Episode

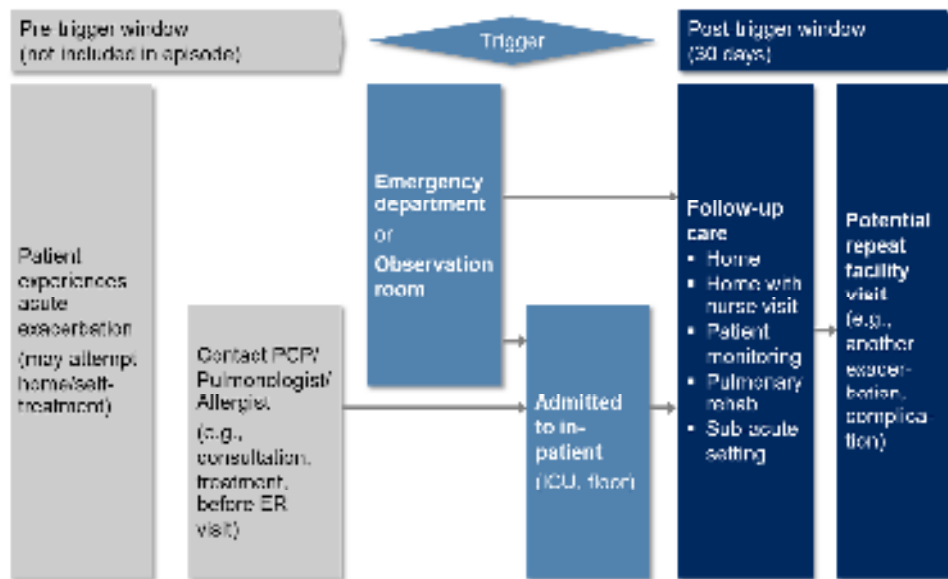
## **OVERVIEW OF A COPD ACUTE EXACERBATION EPISODE**

The chronic obstructive pulmonary disease (COPD) acute exacerbation episode revolves around individual with COPD who are treated at a health care facility for an acute exacerbation of their chronic illness. This episode is triggered by an emergency department (ED) visit, observation stay, and/or an inpatient stay during which the acute symptoms of the COPD exacerbation, such as difficulty breathing, coughing, and shortness of breath, are treated. Following discharge from the hospital, the patient undergoes follow-up care which may include visits by a nurse, patient monitoring, pulmonary rehabilitation, and certain medications. All related care – such as imaging and testing, evaluation and management, and medications – is included in the episode. The quarterback, also called the principal accountable provider or PAP, is the facility where the ED visit, observation stay and/or inpatient admission took place. The complete COPD acute exacerbation episode begins with the ED or inpatient admission and ends 30 days after the patient is discharged.

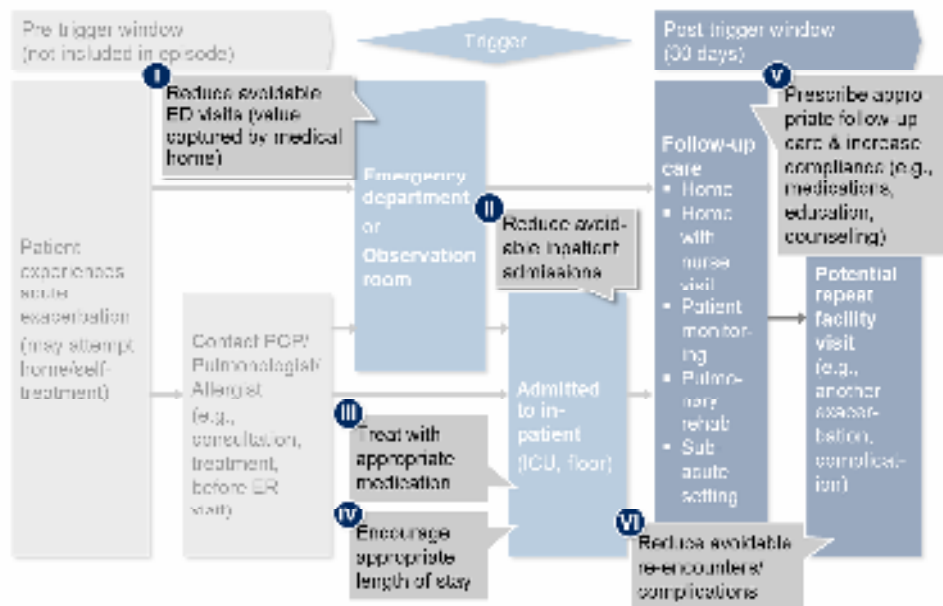
## **CAPTURING SOURCES OF VALUE**

Providers have multiple opportunities during a COPD acute exacerbation to improve the quality and cost of care. For example, a provider may be able to prevent an avoidable inpatient admission from the ED or ensure an appropriate length of stay in the case of an inpatient admission. Providers play a pivotal role in administering and prescribing appropriate medications for the patient throughout the episode, assuring that necessary patient/family education and discharge instruction are provided and ordering and facilitating required follow-up care. These practices reduce the likelihood of repeat acute exacerbations and contribute to the delivery of high quality, cost effective care.

## Illustrative Patient Journey



## Potential Sources of Value



## **ASSIGNING ACCOUNTABILITY**

The quarterback of the episode is the specific health care provider deemed to have the greatest accountability for the quality and cost of care for the patient. To state it differently, the quarterback is the provider who has the greatest ability to influence all of the health care delivered in a given episode. For the COPD acute exacerbation episode, the quarterback is the facility where the ED visit, observation stay, and/or inpatient admission took place. The tax ID of the billing provider (or group) of the associated facility claim will be used to identify the quarterback.

## **MAKING FAIR COMPARISONS**

The episode model is designed to be fair to providers and incentivize best practices without penalizing providers who care for sicker patients. As such, important aspects of the model are:

- Inclusion of only the cost of services and medications that are related to the COPD acute exacerbation in calculation of episode spend.
- Exclusion of episodes when clinical circumstances create the likelihood that the case will deviate substantially from the typical care path or when claims data is likely to be incomplete.
- Risk adjusting episode spend to account for the cost of more complicated patients.

During the trigger window, all services and medications are included in the episode. In the post trigger window, included services are limited to related services and medications, including related labs, DME, follow up visits, or rehabilitation CPT and ICD-9 code. Care for complications in the facility is limited to related admissions based on the CMS Bundled Payments for Care Improvement (BPCI) Initiative readmission list. Related medications are also included based on HIC3 code.

Some exclusions apply to any type of episode, i.e., are not specific to a COPD acute exacerbation. For example, an episode would be excluded if more than one payer was involved in a single episode of care, if the patient was not continuously insured by the payer during the duration of the episode, or if the patient had a discharge status of ‘left against medical advice’. Other examples of exclusion criteria specific to the COPD acute exacerbation episode include a patient who was intubated during the episode or lung cancer. These patients have significantly different clinical courses that cannot be risk adjusted. Furthermore, there may be some factors with a low prevalence or significance that would make accurate risk adjustment difficult and may be used to exclude patients completely instead of adjusting their costs.

For the purposes of determining a Quarterback’s cost of each episode of care, the actual reimbursement for the episode will be adjusted to reflect risk factors captured in recent claims data in order to be fair to providers caring for more complicated patients. Examples of COPD

acute exacerbation episodes with factors likely to be impacted by risk adjustment include those patients with pneumonia or using home oxygen. Over time, a payer may adjust risk factors based on new data.

## MEASURING QUALITY

The episode reimbursement model is designed to reward providers who deliver cost effective care AND who meet certain quality thresholds. A quarterback must meet or exceed all established benchmarks for any quality metric tied to gain sharing in order to be eligible to receive monetary rewards from the episode model. Other quality metrics may be tracked and reported for quality improvement purposes but may not be tied directly to gain sharing.

The quality metric linked to gain sharing for the COPD acute exacerbation episode is:

- **Appropriate follow-up:** Percent of episodes where the patient visits a physician or other practitioner within 30 days of discharge

The quality metrics that will be tracked and reported to providers but that are not tied to gain sharing are:

- **Repeat acute exacerbation within 30 days:** Percent of patients with repeat acute exacerbation within 30 days of discharge
- **Inpatient episodes:** Percent of patients where the acute exacerbation is treated in an inpatient setting (as percent of all episodes)
- **Smoking cessation counseling:** Percent of cases where smoking cessation counseling for the patient and/or family was offered

It is important to note that quality metrics are calculated by each payer on a per quarterback basis across all of a quarterback's episodes covered by that payer. Failure to meet all quality benchmarks tied to gain sharing will render a quarterback ineligible for gain sharing with that payer for the performance period under review.